Performance Data Sheet

RKA5454YXD

General Information

Model	RKA5454YXD	**Refrigerant**	R-134a
Test Condition	ARI	**Performance Test Voltage**	230V ~ 60HZ
Return Gas	-6.7°C (20°F) SUPERHEAT	**Motor Type**	PSC

Performance Information

Evap Temp (°F)		Condensing Temperature (°F)						
		80	90	100	110	120	130	140
-15	Btu/h	1290	1300					
	Watts	297	304					
	Amps	1.34	1.37					
	Lb/h	19.5	19.3					
-10	Btu/h	1550	1530	1510				
	Watts	308	317	326				
	Amps	1.39	1.43	1.47				
	Lb/h	22.7	22.4	22.1				
-5	Btu/h	1850	1790	1740	1690			
	Watts	316	328	340	352			
	Amps	1.43	1.48	1.54	1.59			
	Lb/h	26.4	26.0	25.6	25.2			
0	Btu/h	2200	2110	2020	1930	1850		
	Watts	324	339	353	368	383		
	Amps	1.46	1.52	1.59	1.66	1.73		
	Lb/h	30.7	30.2	29.7	29.2	28.7		
5	Btu/h	2590	2470	2350	2230	2110		
	Watts	330	348	365	383	400		
	Amps	1.48	1.56	1.64	1.72	1.80		
	Lb/h	35.5	34.9	34.4	33.8	33.2		
10	Btu/h	3030	2880	2720	2570	2410	2250	2100
	Watts	335	355	376	396	416	437	457
	Amps	1.50	1.59	1.68	1.77	1.87	1.96	2.06
	Lb/h	40.8	40.2	39.5	38.8	38.2	37.4	36.7
15	Btu/h	3520	3330	3140	2950	2760	2570	2380
	Watts	339	362	385	408	431	454	477
	Amps	1.50	1.61	1.71	1.82	1.93	2.03	2.14
	Lb/h	46.6	45.9	45.2	44.4	43.6	42.8	42.0
20	Btu/h	4050	3830	3600	3380	3160	2940	2710
	Watts	340	366	392	418	444	470	496
	Amps	1.51	1.62	1.74	1.86	1.98	2.10	2.22
	Lb/h	52.8	52.1	51.3	50.5	49.6	48.8	47.9

25	Btu/h	4620	4370	4110	3860	3600	3350	3090
	Watts	341	369	398	427	456	485	513
	Amps	1.50	1.63	1.76	1.89	2.02	2.15	2.29
	Lb/h	59.6	58.7	57.9	57.0	56.1	55.2	54.2
30	Btu/h	5240	4950	4660	4380	4090	3800	3510
	Watts	339	371	403	434	466	498	529
	Amps	1.49	1.63	1.77	1.92	2.06	2.20	2.35
	Lb/h	66.8	65.9	65.0	64.0	63.1	62.1	61.0
35	Btu/h	5900	5580	5260	4940	4620	4300	3970
	Watts	336	371	405	440	475	509	544
	Amps	1.47	1.62	1.78	1.93	2.09	2.25	2.41
	Lb/h	74.4	73.5	72.5	71.5	70.5	69.4	68.4
40	Btu/h	6600	6250	5900	5550	5190	4840	4480
	Watts	331	369	406	444	482	519	557
	Amps	1.45	1.61	1.78	1.95	2.12	2.28	2.46
	Lb/h	82.5	81.5	80.5	79.5	78.4	77.3	76.1
45	Btu/h	7350	6970	6580	6200	5810	5420	5030
	Watts	324	365	406	446	487	527	568
	Amps	1.42	1.59	1.77	1.95	2.13	2.32	2.50
	Lb/h	91.0	90.0	88.9	87.8	86.7	85.5	84.4
50	Btu/h	8140	7720	7310	6890	6470	6050	5630
	Watts	315	359	403	447	490	534	577
	Amps	1.38	1.57	1.76	1.95	2.15	2.34	2.53
	Lb/h	100	98.9	97.8	96.6	95.5	94.3	93.0
55	Btu/h	8970	8530	8080	7620	7170	6720	6270
	Watts	304	351	398	445	492	538	585
	Amps	1.34	1.54	1.74	1.95	2.15	2.36	2.56
	Lb/h	109	108	107	106	105	103	102

COEFFICIENTS	CAPACITY	POWER	CURRENT	MASS FLOW
C1	2.880683E+03	2.076776E+02	9.335853E-01	3.408993E+01
C2	1.280777E+02	-3.116494E+00	-1.501419E-02	1.035500E+00
C3	-8.561050E+00	1.454841E+00	6.580872E-03	-4.320798E-02
C4	8.955114E-01	-3.274853E-02	-1.404187E-04	9.632096E-03
C5	-6.714755E-01	5.755693E-02	2.545565E-04	-1.568800E-03
C6	1.677327E-03	-1.075346E-04	-2.029637E-06	5.538409E-05
C7	-4.655743E-04	-8.939204E-05	2.424087E-07	-1.485616E-05
C8	2.328252E-04	7.245674E-05	-1.026133E-07	8.606009E-06
C9	-1.037231E-06	-1.518811E-05	-1.293875E-08	-5.707033E-07
C10	-1.862412E-05	1.336000E-06	2.091021E-08	-5.746127E-07

Value = C1 + C2 * Te + C4 * Te^2 + C7 * Te^3 + (C3 + C5 * Te + C8 * Te^2) * Tc + (C6 + C9 * Te) * Tc^2 + C10 * Tc^3

Te = Evaporator Temperature

Tc = Condensing Temperature